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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/523,505	07/22/2005	Masanori Wada	JCLA11867	1294
23900	7590	12/21/2005	EXAMINER	
J C PATENTS, INC. 4 VENTURE, SUITE 250 IRVINE, CA 92618			TRAN, HOANG Q	
			ART UNIT	PAPER NUMBER
			2874	

DATE MAILED: 12/21/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

10/523,505

Applicant(s)

WADA ET AL.

Examiner

Hoang Tran

Art Unit

2874

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 February 2005 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☒ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 07/22/2005 02/02/2005
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_

## **DETAILED ACTION**

### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Information Disclosure Statement***

The prior art documents submitted by applicant in the information Disclosure Statement filed on July 22, 2005 have all been considered and made of record (note the attached copy of form PTO-1449).

### ***Drawings***

Five (5) sheets of formal drawings were filed on 02/02/2005 and have been accepted by the Examiner.

### ***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

**Claims 1-4, 6, and 7-9 are rejected under 35 U.S.C. 102(b) as being anticipated by the US Patent to Takeuti et al (6,746,160B2).**

In terms of Claim 1, Takeuti teaches a ferrule for an optical fiber connector, comprising: an inner hole (Col 3 Lines [5-10]) through which an optical fiber is inserted; and a tip end face that is polished under a condition that the optical fiber is inserted in the inner hole to be fixed with an adhesive (Col 3 Lines [5-10]), characterized in that the

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tip end face (Fig 7B) has a central side region (Fig 7B) including an opening of the inner hole and an outer circumferential side region on an outer circumferential side from the central side region (Fig 7B), and wettability with respect to the adhesive is small in the outer circumferential side region than in the central side region (Col 10 Lines [20-50]).

As for Claim 2, Takeuti teaches the ferrule connector of Claim 1, characterized in that the outer circumferential side region comprises a chamfered portion (Col 2 Lines [60-67]).

As for Claim 3, Takeuti teaches the ferrule connector of Claim 1, characterized in that the outer circumferential side region has a contact angle of  $30^\circ$  or more (Col 18 Lines [35-45]).

As for Claim 4, Takeuti teaches the ferrule connector of Claim 1, characterized in that the outer circumferential side region is subjected to surface treatment by adhesion or chemical bonding of an organic compound to a surface of the outer circumferential side region (Col 3 Lines [40-50]).

As for Claim 6, Takeuti teaches the ferrule connector of Claim 1, characterized in that the outer circumferential side region is subjected to a surface treatment to have a surface roughness larger than that of the central side region. The reference discloses the use of a PC polished (Col 18 Lines [50-60]), which is well known in the industry to create a surface roughness. The reference does not mention the use of a PC polish on the central section.

As for Claim 7, Takeuti teaches the ferrule connector of Claim 1, characterized in that the ferrule is made of crystallized glass or glass (Abstract).

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As for Claim 8, Takeuti teaches the ferrule connector of Claim 7, characterized in that the crystallized glass or glass contains Si, Al, or Ti in an amount of 10% by mass or more in terms of an oxide (Col 5 Lines [45-55]).

In terms of Claim 9, Takeuti teaches a method of producing a ferrule for an optical fiber connector in which an optical fiber is inserted in an inner hole of the ferrule (Col 3 Lines [5-10]) and fixed with an adhesive (Col 3 Lines [5-10]), and a tip end face of the ferrule is polished with the optical fiber (Col 2 Lines [5-15]), the method being characterized by comprising: diving the tip end face into a central side region including an opening of the inner hole and an outer circumferential side region on an outer circumferential side from the central side region (Col 3 Lines [5-10] and Col 18 Lines [5-65]); and subjecting the outer circumferential side region to a surface treatment to have wettability with respect to the adhesive small than that of the central side region (Col 10 Lines [20-50]).

***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

**Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over**

**Takeuti in view of the US Patent Application Publication to Takizawa (2003/0121213).**

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With respect to Claim 5, Takeuti teaches the connector of Claim 4, Takeuti does not teach the connector characterized in that the organic compound is at least one compound selected from the group consisting of a silane base, siloxane, silazane, titanate, and aluminate base compound. Takizawa does teach the use of an organic compound of silane and titanate base to couple optical signals (Page 1 Paragraph [0013]). It would have been obvious at the time of the invention to apply the teachings of Takizawa organic (silane and titanate) base compound to the connector of Takeuti in order to bond the optical fiber to connector to limit signal loss.

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoang Tran whose telephone number is 571-272-5049. The examiner can normally be reached on 9:00AM - 5:00 PM.


If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rodney Bovernick can be reached on 571-272-2344. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Ht

  
Hoang Tran  
AU 2874  
11/30/2005

  
MICHELLE CONNELLY-CUSHWA  
PRIMARY EXAMINER  
12/12/05